Attorney Docket No.: 19916-003800US Client Ref. No.: 0009

As the below named inventor(s), I/we declare that:



PTO/SB/01A (10-00)

Client Ref. No.: 0009

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

This declaration is di	rected to:	:		
		The attached application	n, or	
	\boxtimes	Application No. 09/784,8	366, filed on <u>February 15, 2001</u> ,	
		as amended on	(if applicable);	
I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;				
I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;				
I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and				
All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.				
FULL NAME OF INVE	UTOP(S)			
1 OFF IAVIAIF OL HAAF	11 OK(3)			
Inventor one: Steph	nen A. Er	mpedocles	Date:	
Signature:	-		Citizen of: United States	
Inventor two: Andre	w R. Wa	tson	Date: #1. 6-14-01	
Signature: / /	(, h	Mot	Citizen of: United Kingdom	
Additional inventors are being named on additional form(s) attached hereto.				
surden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the ublic to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is stimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the mount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Vashington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for attents, Washington, DC 20231.				

Attorney Docket No.: 19916-003800US Client Ref. No.: 0009

PTO/SB/01A (10-00)

Approved for use through 10/31/2002. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

As the below named inventor(s), I/we declare that:					
This declaration is o	directed to):			
		The attached applicatio	n, or		
-	\boxtimes	Application No. 09/784,	<u>866,</u> filed on <u>l</u>	ebruary 15, 2001,	
•		as amended on	(if applica	ble);	
I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;					
I/ we have reviewe claims, as amended	I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;				
I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and					
All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.					
FULL NAME OF INVE	NTOR(S)			
Inventor one: Step	hen A. E	mpedocles	Date: 6	alis/01	
Signature:			Citizen of:	United States	
Inventor two: Andr	ew R. Wa	atson	Date:		
Signature:			Citizen of:	United Kingdom	
Additional inventors are being named on additional form(s) attached hereto.					
urden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the ublic to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is stimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the nount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, lashington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for attents, Washington, DC 20231.					

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PTO/SB/81 (10-00)

Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	09/784,866		
Filing Date	February 15, 2001		
First Named Inventor	Empedocles, Stephen A.		
Group Art Unit	1645	-	
Examiner Name	Not Yet Assigned		
Attorney Docket Number	19916-003800US		

I hereby a	ppoint:					
☐ Practition	Practitioners at Customer Number 20350				Place Customer Number Bar Code abel here	
☑ Practition	oner(s) nar	ned below:			.aber riere	
		Name		Registration Number		
	Jeffry S. Mann			42,837		
	Eugenia Garrett-Wackowski			37,330		
·		Kenneth Barovsky		36,442		
as my/our a Trademark (as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the Patent and Trademark Office connected therewith.					the Patent and
Please change the correspondence address for the above-identified application to: The above-mentioned Customer Number. OR						
Firm or Individua	al Name	Jeffry S. Mann, Esq.				
Address		Townsend and Townsend and Crew LLP				
Address		. Two Embarcadero Center, 8th Floor				
City		San Francisco Sta		CA ZIP 94111-3834		ļ.
Country		United States				
Telephone		(415) 576-0200 Fax (415) 576-0300				***
I am the: ☐ Applicant/Inventor. ☐ Assignee of record of the entire interest. See 37 CFR 3.71.						
Certificate under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96). SIGNA URE of Applicant or Assignee of Record						
Name Kenyeth Baroysky, Vice Resident and Intellectual Property Counsel						
Signature						
Date 22 JUN Ø!						
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*. *Total of 1 forms are submitted.						

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any Comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. SF 1190475 v1

H-4

PTO/SB/96 (08-00) Approved for use through 10/31/2002. OMB 0651-0031 0300

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE der the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Attorney Docket No. 19916-003800

STATEMENT UNDER 37 CFR 3.73(b) Applicant/Patent Owner: Quantum Dot Corporation Filed/Issue Date: February 15, 2001 Application No./Patent No.: 09/784,866 Entitled: SINGLE TARGET COUNTING ASSAYS USING SEMICONDUCTOR NANOCRYSTALS Quantum Dot Corporation a California corporation (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) states that it is: the assignee of the entire right, title, and interest; or 1. \bowtie an assignee of an undivided part interest П in the patent application/patent identified above by virtue of either: A. M assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame ____, or for which a copy thereof is attached. OR B. \(\subseteq\) A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below: 1. From: The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. ☐ Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8] The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee. 22 Ton \$1 Signature Kenneth Barovsky, Ph.D Typed or printed name Vice President and Intellectual Property Counsel

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



19916-003800US

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, STEPHEN A. EMPEDOCLES, of 2507 Mardell Way, Mountain View, CA 94043; ANDREW R. WATSON, of 1 Spring Lane, Belmont, CA 94002; hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

SINGLE TARGET COUNTING ASSAYS USING

SEMICONDUCTOR NANOCRYSTALS

Date(s) of execution of Declaration: June 15, 2001 and June 14, 2001,

respectively

Filing Date:

February 15, 2001

Application No.:

09/784,866; and

WHEREAS, Quantum Dot Corporation, a California corporation, located at 26136 Research Road, Hayward, CA, 94545, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated. Dated: 6/15/01 STEPHEN A. EMPEDOCLES Dated: ANDREW R. WATSON SF 1190434 v1



19916-003800US

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, STEPHEN A. EMPEDOCLES, of 2507 Mardell Way, Mountain View, CA 94043; ANDREW R. WATSON, of 1 Spring Lane, Belmont, CA 94002; hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

SINGLE TARGET COUNTING ASSAYS USING

SEMICONDUCTOR NANOCRYSTALS

Date(s) of execution of Declaration: June 15, 2001 and June 14, 2001,

respectively

Filing Date:

February 15, 2001

Application No.:

09/784,866; and

WHEREAS, Quantum Dot Corporation, a California corporation, located at 26136 Research Road, Hayward, CA, 94545, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated:	
	STEPHEN A. EMPEDOCLES
Dated: 6-14-01	A.R. Wit
SF 1190434 v1	ANDREW R. WATSON